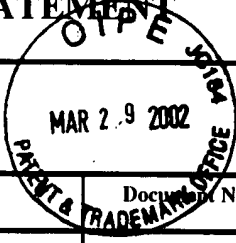


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	Applicant(s): Daniel J. O'Sullivan	Confirmation No.: 1710
	Filing Date: June 19, 2001	Group: 1651

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation Yes No

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	Document Description
Stew	Bezkorovainy et al., "Iron Metabolism in Bifidobacteria," <i>Int. Dairy Journal</i> 6, 1996; 6(10):905-919
Stew	Bezkorovainy et al., "Aspects of Iron Metabolism in Bifidobacterium Bifidum Var. Pennsylvanicus," <i>Int. J. Biochem.</i> , 1983; 15(3):361-366
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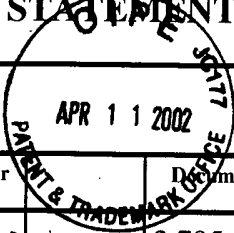
EXAMINER Debra H. Ware	Date Considered 10-17-02
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Stew	2,785,108	03/12/57	Hawley			
Stew	2,935,503	05/03/60	Hawley			
Stew	4,091,117	05/23/78	Mutai et al.			
Stew	4,716,115	12/29/87	Gonzalez et al.			
Stew	5,173,297	12/22/92	Vedamuthu et al.			
Stew	5,294,458	03/15/94	Fujimori			
Stew	5,340,577	08/23/94	Nisbet et al.			
Stew	5,494,664	02/27/96	Brassart et al.			
Stew	5,520,936	05/28/96	Delespaul et al.			
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Stew	5,602,109	02/11/97	Masor et al.			
Stew	5,700,590	12/23/97	Masor et al.			
Stew	5,753,614	05/19/98	Blackburn et al.			
Stew	5,776,524	07/07/98	Reinhart			
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Stew	5,902,578	05/11/99	Halpin-Dohnalek et al.			
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Stew	5,922,375	07/13/99	Luchansky et al.			
Stew	5,952,314	09/14/99	DeMichele et al.			
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Stew	5,972,415	10/26/99	Brassart et al.			

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FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation
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EXAMINER <i>Delunsky W</i>	Date Considered <i>10-17-02</i>
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OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initials	Document Description
Stu	American Type Culture Collection, "ATCC Number 9341," organism: <i>Micrococcus luteus</i> (Schroeter); designation: FDA strain PCI 1001 [online]; Manassas, VA [retrieved on 2002-04-03] from the Internet. Retrieved from the Internet: <URL: http://phage.atcc.org/cgi-bin/searchengine/longview.cgi?view=ba,534636,9341&text=9341 >; 2 pgs.
Stu	American Type Culture Collection, "ATCC Number 29425," organism: <i>Escherichia coli</i> (Migula); designation: K12 [online]; Manassas, VA [retrieved on 2002-04-03] from the Internet. Retrieved from the Internet: <URL: http://phage.atcc.org/cgi-bin/searchengine/longview.cgi?view=ba,5225109,29425&text=k12 >; 1 pg.
Stu	Anderssen et al., "Antagonistic activity of <i>Lactobacillus plantarum</i> C11: two new two-peptide bacteriocins, plantaricins EF and JK, and the induction factor plantaricin A," <i>Appl. Environ. Microbiol.</i> , 64(6):2269-2272 (June 1998).
Stu	Archibald, " <i>Lactobacillus plantarum</i> , an organism not requiring iron," <i>FEMS Microbiol. Letts.</i> , 19:29-32 (1983).
Stu	Bezkorovainy, "Iron transport and utilization by bifidobacteria," In <i>Biochemistry and Physiology of Bifidobacteria</i> , Bezkorovainy et al., eds; CRC Press, Inc., Boca Raton, FL; pp. 147-176 (1989).
Stu	Bollag et al., <i>Protein Methods</i> , Wiley and Sons, Inc., New York, NY; title page, publisher's page and table of contents – 10 pgs. (1996).
Stu	Braun "Effect of consumption of human milk and other formulas on intestinal bacterial flora in infants," Chapter 23 in <i>Textbook of Gastroenterology and Nutrition in Infancy</i> , Raven Press, New York, NY; pp. 247-253 (1981).
Stu	Breed et al., <i>Bergey's Manual of Determinative Bacteriology</i> , 7 th Edition. The Williams and Wilkins Co., Baltimore, MD; title page, publisher's page, and table of contents only – 8 pages (1957).
Stu	de Ruyter et al., "Functional analysis of promoters in the nisin gene cluster of <i>Lactococcus lactis</i> ," <i>J. Bacteriol.</i> , 178(12):3434-3439 (June 1996).
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Examiner Initials	Document Description
DPW	Engelke et al., "Biosynthesis of the lantibiotic nisin: genomic organization and membrane localization of the NisB protein," <i>Appl. Environ. Microbiol.</i> , 58(11):3730-3743 (Nov. 1992).
DPW	Engelke et al., "Regulation of nisin biosynthesis and immunity in <i>Lactococcus lactis</i> 6F3," <i>Appl. Environ. Microbiol.</i> , 60(3):814-825 (March 1994).
DPW	Fuller, R., "Probiotics in man and animals," <i>J Appl Bacteriol.</i> , 66(5):365-378 (May 1989).
DPW	Fuller, R., "Probiotics for farm animals," In <i>Probiotics: A Critical Review</i> , Tannock, ed., Horizon Scientific Press, Wymondham, UK; pp. 15-22 (1999).
DPW	Green, "Case report: fatal anaerobic pulmonary infection due to <i>Bifidobacterium eriksonii</i> ," <i>Postgrad Med.</i> 1978 Mar;63(3):187-8, 190, 192.
DPW	Gibson et al., "Regulatory effects of bifidobacteria on the growth of other colonic bacteria," <i>J Appl Bacteriol.</i> , 77(4):412-420 (Oct. 1994).
DPW	Hansen, "Nisin as a model food preservative," <i>Crit Rev Food Sci Nutr.</i> , 34(1):69-93 (1994).
DPW	Ibrahim et al., "Inhibition of <i>Escherichia coli</i> by bifidobacteria," <i>J. Food Prot.</i> , 56(8):713-715 (Aug. 1993).
DPW	Immonen et al., "The codon usage of the <i>nisZ</i> operon in <i>Lactococcus lactis</i> N8 suggests a non-lactococcal origin of the conjugative nisin-sucrose transposon," <i>DNA Seq.</i> , 5(4):203-218 (1995).
DPW	Klaenhammer, "Genetics of bacteriocins produced by lactic acid bacteria," <i>FEMS Microbiol. Rev.</i> , 12(1-3):39-85 (Sept. 1993).
DPW	Kuipers et al., "Characterization of the nisin gene cluster <i>nisABTCIPR</i> of <i>Lactococcus lactis</i> . Requirement of expression of the <i>nisA</i> and <i>nisI</i> genes for development of immunity," <i>Eur. J. Biochem.</i> , 216(1):281-291 (Aug. 1993).
DPW	Kuipers et al., "Autoregulation of nisin biosynthesis in <i>Lactococcus lactis</i> by signal transduction," <i>J. Biol. Chem.</i> , 270(45):27299-27304 (Nov. 1995).
DPW	Kullen et al., "Evaluation of using a short region of the <i>recA</i> gene for rapid and sensitive speciation of dominant bifidobacteria in the human large intestine," <i>FEMS Microbiol. Lett.</i> , 154(2):377-383 (Sept. 1997).
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EXAMINER Duluth, Ga.	Date Considered 10-17-02
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JOE APR 11 2002 PATENT & TRADEMARK OFFICE	Mitsuoka et al., "Ecology of the bifidobacteria," <i>American Journal of Clinical Nutrition</i> . 1977 Nov;30(11):1799-1810.
JOE	Mudler et al. "Bifidobacteria and bifidogenic factors," <i>Canadian Institute of Food Science Technology Journal</i> 1990;23(1):29-41.
JOE	Muñoz et al., "Selective medium for isolation and enumeration of <i>Bifidobacterium</i> spp.," <i>Appl. Environ. Microbiol.</i> , 54(7):1715-1718 (July 1988).
JOE	Neilands, "Molecular aspects of regulation of high affinity iron absorption in microorganisms," Chapter 3 in <i>Metal-Ion Induced Regulation of Gene Expression</i> , which is Vol. 8 of series <i>Adv. Inorg. Biochem.</i> , pp. 63-90 (1990).
JOE	Neilands et al. "Comparative biochemistry of microbial iron assimilation," In <i>Iron Transport in Microbes, Plants and Animals</i> , Winkelmann et al., eds.; VCH mbh, Weinheim, Germany, pp. 3-33 (1987).
JOE	Nes et al., "Biosynthesis of bacteriocins in lactic acid bacteria," <i>Antonie Van Leeuwenhoek</i> , 70(2-4):113-128 (Oct. 1996).
JOE	Nilsen et al., "An exported inducer peptide regulates bacteriocin production in <i>Enterococcus faecium</i> CTC492," <i>J. Bacteriol.</i> , 180(7):1848-1854 (April 1998).
JOE	O'Sullivan, "Cloning, organization and regulation of genes involved in iron metabolism in fluorescent <i>Pseudomonas</i> spp. with biocontrol potential," Ph.D. thesis, National University of Ireland, Cork; pp. 1-120 (1990).
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JOE	O'Sullivan et al., "Tracking of probiotic bifidobacteria in the intestine," <i>Int. Dairy J.</i> , 8:513-525 (1998).
JOE	O'Sullivan "Characterization of non-acid inhibitory characteristics of a human <i>Bifidobacterium</i> isolate against clostridia and <i>E. coli</i> ," American Dairy Science Association 1999 Annual Meeting, Memphis Cook Convention Center, Memphis, TN, June 20-23, 1999 (abstract available June 19, 1999).
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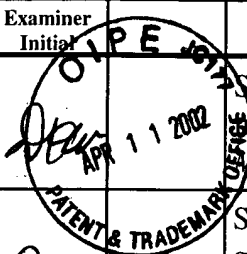
EXAMINER J. H. K. W.	Date Considered 10-27-02
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JSW	Supard et al., "Biology of the bifidobacteria," <i>Bacteriol Rev.</i> , 37(2):136-165 (June 1973).
JSW	Stetlow, et al., "Aberrant crypts in human colonic mucosa: putative preneoplastic lesions," <i>J Cell Biochem Suppl.</i> 1992;16G:55-62.
JSW	Rammelsberg et al., "Antibacterial polypeptides of <i>Lactobacillus</i> species," <i>J. Appl. Bacteriol.</i> , 69:177-184 (1990).
JSW	Resnick et al., "Assessment of bifidobacteria as indicators of human fecal pollution," <i>Appl Environ Microbiol.</i> , 42(3):433-438 (Sept. 1981).
JSW	Rossi et al., "Improved cloning vectors for <i>Bifidobacterium</i> spp," <i>Lett. Appl. Microbiol.</i> , 26(2):101-104 (Feb. 1998).
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JSW	Sanders, "Probiotics," <i>Food Technol.</i> , 53:67-77 (1999).
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JSW	Scardovi et al., "Deoxyribonucleic acid homology among the species of the genus <i>Bifidobacterium</i> isolated from animals," <i>Archiv fur Mikrobiologie</i> , 1970;72:318-325.
JSW	Shefet et al., "Efficacy of optimized nisin-based treatments to inhibit <i>Salmonella typhimurium</i> and extend shelf life of broiler carcasses," <i>J. Food Prot.</i> , 58(10):1077-1082 (1995).
JSW	Siegers et al., "Genes involved in immunity to the lantibiotic nisin produced by <i>Lactococcus lactis</i> 6F3," <i>Appl. Environ. Microbiol.</i> , 61(3):1082-1089 (Mar. 1995).
JSW	Singh et al., " <i>Bifidobacterium longum</i> , a lactic acid-producing intestinal bacterium inhibits colon cancer and modulates the intermediate biomarkers of colon carcinogenesis," <i>Carcinogenesis</i> . 1997 Apr;18(4):833-41.

EXAMINER Julius K. Wey	Date Considered 10-17-02
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Stew	Torres et al., "Haem iron-transport system in enterohaemorrhagic <i>Escherichia coli</i> O157:H7," <i>Mol. Microbiol.</i> , 23(4):825-833 (Feb. 1997).
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